

A photograph of an older man and woman sitting on a large, mossy rock. The man, on the left, is wearing a light blue long-sleeved shirt, dark blue jeans, and a white baseball cap. The woman, on the right, is wearing a white long-sleeved shirt and light blue jeans. They are both looking out over a dense green forest. In the background, a body of water is visible under a clear sky. The scene is brightly lit, suggesting a sunny day.

CHAPTER 18

Forest Recreation Management

(Chapter Background Photo WDNR, Jeff Martin)

CHAPTER 18
FOREST RECREATION MANAGEMENT

Integrated Resource Management Considerations 18-2

PLANNING AND DESIGN 18-4

OPERATIONAL CONSIDERATIONS 18-7

 Construction 18-7

BMPs: Invasive Species 18-7

 Operations..... 18-8

RESOURCES FOR ADDITIONAL INFORMATION 18-9



Forest recreation management involves the selection, development, operation, and maintenance of recreation areas to provide quality outdoor experiences for the recreation user.

Forest-based recreation is frequently a primary objective of private forestland ownership. University of Wisconsin Extension research indicates that the most popular recreational pursuits of private forest woodland owners include hunting, camping, snowmobiling, hiking, fishing, ATV riding, wildlife watching, off-road bicycling, cross-country skiing, and berry picking. Proper forest recreation management can enhance the recreation experience, while at the same time, complementing a number of other landowner objectives.

Integrated Resource Management Considerations

- Forest recreation related development can impact **riparian areas and wetlands** if not carefully planned and constructed. Improper location, careless construction, and overuse of recreation sites can damage vegetation needed to retain sediments and stabilize banks and shorelines.
- **Soil productivity** can be reduced when soils are compacted, rutted, displaced, or eroded. Some equipment used in developing recreation sites can cause these kinds of soil damage. Soil damage can also be caused by recreational vehicles (ATVs, pickups, dirt bikes, snowmobiles when there is not enough snow, mountain bikes), horses, or by the trampling of too many hiking boots.
- Poorly designed and/or overused recreational developments adjacent to waterbodies have the potential to impact **water quality**. Wisconsin's Forestry Best Management Practices (BMPs) for Water Quality and local zoning regulations are important considerations.
- Recreational activities can introduce and/or spread a variety of **invasive species**. Planning for recreational development should include plans for monitoring and controlling invasives. To find a complete list of recreational user BMPS for invasive species, see the resources section at the end of this chapter.

Here are a few examples of BMPs for limiting the spread and introduction of invasive species for recreational users:

- Plan activities to limit the potential for the introduction and spread of invasive species.
- Avoid traveling through or working in small, isolated populations of invasive plants.
- Clean equipment, shoes, and clothing upon leaving infested areas.
- Minimize soil disturbance.
- Do not plant known invasive plants.
- Inform and educate users of an area about common invasive species.
- Provide invasive species training opportunities for staff, contractors, and volunteers.



Figure 18-1: A simple boot cleaning once you leave an area with invasive plants can help minimize the introduction and spread of invasive plants to other areas.



Figure 18-2: Multiple-use trail systems are common in many public and industrial forestlands. These areas often receive a lot of traffic, and may need special protective measures to guard against soil erosion and other site damage.

- Trails, campsites and other recreational developments can increase **wildlife** viewing opportunities, but careful planning is needed to avoid degradation of unique habitats, and adversely impacting rare or sensitive species through increased human use.
- **Visual quality** is normally a primary consideration in the development of recreational areas. Care must be taken to ensure that construction methods and standards, maintenance activities, levels of use, and potential user conflicts are also considered in order prevent visual degradation of both the developed area and the adjacent surroundings.
- Carefully designed **timber harvests** can present opportunities for later use of haul roads and landings for recreational purposes.
- **Cultural areas** can provide excellent recreational/ educational opportunities, but protection from possible overuse, vandalism, theft, and other potential problems associated with increased human use must be carefully considered.

PLANNING AND DESIGN

Well, thought out recreation areas are easy to use, inviting, and make sense. You may consider hiring a landscape architect to assist with planning for more extensive developments. As you plan your own recreation development, think back to sites you have used that worked well. Recall what their orientation was. For example, beaches generally should face south or west, but the snow on ski trails last longer facing north or east. Sketch out your plan on topographic maps and air photos to consider the relationships between different recreation uses, forest cover, slope, orientation, and other factors. Discuss plans with others that have already done similar work, and consider their comments. Keep an open mind and re-examine your initial thoughts before committing to a set plan. Up-front planning can save you time and money.

- **Recreation management begins with an assessment of an owner's values and goals for the forestland.**

Some things to think about include:

- What are the desired activities?
- Is enough space available for the desired activities?
- Can uses be separated by season or distance?
For example, can hunting trails be used for cross-country skiing trails in the winter? Is your desired hunting experience compatible with ATV trails?
- What activities are occurring on adjoining land?
- Who may be using the forestlands? Are they private or public lands?
- How long will the land be held? Can significant development be justified?
- Will the activity proliferate the spread of non-native invasive plants or invasive insects and diseases (through the introduction and movement of firewood)?
- Can hazards such as defective or dead trees be mitigated to minimize the risk of injury from tree failure? Consider creating a hazard tree management plan if you are inviting people to camp, congregate or remain stationary in a location where tree failures could injure visitors.



(© Jeff Martin, JMAR Foto-Werks)

Figure 18-3: A snowshoer wanders the woodlands of northern Wisconsin.

- **Consider other resource activities that may be compatible** with recreational development, and integrate planning whenever possible. Forest management activities, for example, can be part of an effort to develop recreational opportunities. Consider laying out harvest roads to accommodate trail development, and include site remediation as part of the timber sale contract. Revenues generated can be used to fund efforts to enhance the habitat value of landings and create wildlife viewing areas.
- **Environmental considerations** should be part of the planning process. Recreational development should be environmentally responsible. Consider soil types, topography, and water resources. Resources are available from a number of sources to assist in providing information and technical advice (see the resources at the end of the chapter for more information). Efforts should also be made to identify any threatened and endangered species or rare habitats that may occur on sites to be developed (see Chapter 3: Wildlife Habitat).



Figure 18-4: Bird watching is a popular activity throughout Wisconsin's forestland.

- **An assessment of the “carrying capacity” of the land is a key element** of recreation management planning. Different activities have specific spatial needs, and similarly, the land's ability to sustain a particular level of use varies by activity. Responsible planning is required to care for the site and meet the expectations of the user. Consider limiting the quantity of activities in order to provide a higher quality experience. Seek advice from landscape architects or other qualified planners for large scale or intensive development. These professionals can save a great deal of money and frustration.
- **Consider how to address conflicts between users and groups of users.** You may have to separate uses by space or scheduling to avoid conflicts. Depending on ownership, you may need to consider providing law enforcement, trail patrols, and emergency medical treatment.
- **Maintenance** of a recreation area is seen as part of the recreation experience by some. Others want to minimize this task and maximize their recreation time. Maintenance needs, including mitigation of trees that could be hazardous should be considered

as plans are developed. Generally, well-planned and constructed facilities are easier and less costly to maintain. Check with other operators of recreation areas for advice on surface finishes, trail construction, mowing equipment, etc.

- **Cultural resources** like Native American burial sites or work sites, logging camps, or homestead sites can be very interesting and also provide historical insights. Planning for recreational development should address cultural resource issues in terms of both protection and interpretation. Existing cultural resource inventories should be reviewed early in the planning process. If no information is available, field inspections should be conducted before development plans are finalized to determine presence or absence of cultural resources. If cultural resources are present in the development area, it may be possible to modify construction plans to reduce or eliminate damage to the resources. Cultural resource professionals can help determine the best approaches to the mitigation of potential damage (see the Resource Directory for sources of cultural resource assistance).

- **Check with local authorities to assure any planned developments meet code and zoning requirements.** Working with local zoning and code enforcement personnel before planning gets too far along can help you avoid costly re-work later. They are also familiar with local recreation sites, and can be a valuable source of information.
- **Handicapped access needs** should be evaluated and made part of the planning process – particularly if public use is anticipated.
- **How will you pay for your development?** Funding through the Wisconsin Forest Landowner Grant Program or federal cost-sharing assistance programs

may be available for forestry projects that enhance recreational, historic or aesthetic features on private property. Activities eligible for financial assistance must be included in a Wisconsin DNR-approved Forest Stewardship Plan for the land. Contact your local Wisconsin DNR forester or Wisconsin DNR Service Center for additional information and application material. Grants may also be available from state and federal agencies to assist with the development of recreation sites on publicly-owned land. Consult with Wisconsin DNR Community Financial Assistance staff for more information about that opportunity.



(WDNR, Jeff Martin)

Figure 18-5: An urban park provides the opportunity for some city dwellers to experience a local forest.



(WDNR, Jeff Martin)

Figure 18-6: A turkey hunter in southern Wisconsin.

OPERATIONAL CONSIDERATIONS

LIABILITY – CAN I BE SUED?

Landowners, including governmental bodies and non-profit organizations that own, lease, or occupy land, or have a recreational agreement with another owner, have certain protections against liability under Wisconsin's Recreation Use Statute, 895.52. This important law says that landowners do not have a duty to inspect the property, keep it safe, or give warning of an unsafe condition. Only when a landowner acts maliciously or fails to disclose a known hazard, may he/she be liable. The law covers nearly every outdoor recreation activity, except organized team sports. Discuss this statute with your insurance provider as you consider risk management for your property. For more information, see <http://learningstore.uwex.edu/assets/pdfs/G3326.PDF>.

Construction

- Install and maintain appropriate erosion control structures to protect water quality and soil productivity (see Chapter 12: Forest Road Construction and Maintenance).
- Use “fill-only” construction techniques in the area of the cultural resource.
- Do not allow surfaces in archaeologically sensitive areas to erode, slump or wash out. Implement temporary stabilization methods to preserve the shape, slope, elevation, and contours of archaeological sites and historic features. Stabilization should not alter the historic character of the cultural resource.
- If practical and feasible, avoid cultural resource areas when constructing recreational facilities. If it is not possible to completely avoid a cultural resource, minimize or eliminate soil disturbance and erosion in the vicinity of the resource.
- The *Wisconsin DNR Trails and Design Handbook* can be of assistance when planning trails, and includes such concerns as marking and signing, trail width, surfacing material, grades, and on-going maintenance. It provides detailed diagrams as well as signage suggestions (see the Resource Directory for a web link to Wisconsin DNR handbooks).
- The *Wisconsin DNR Trails and Design Handbook* can also be used as a guide to the development of general recreational facilities. It has chapters that include picnic areas, swimming beaches, trails, camp areas, parking lots, and fishing facilities, and provides guidance on developing facilities that are accessible.

- When landscaping sites, make sure to choose plants that are appropriate to your area and are quality stock. Plant according to specifications, and provide adequate follow-up care. Do not use non-native invasive plant species.

BMP: Invasive Species

- 6.4 Select plant materials that are site appropriate to favor establishment and vigor.



(WDNR, Brigit Brown)

Figure 18-7: Trail construction should consider invasive plants. The honeysuckle shrub adjacent to this trail and other invasive plants may spread or invade new areas due to the disturbance.

Operations

- When operating within a riparian management zone, confine recreational off-highway vehicle use and other non-foot traffic to trails that are designed, constructed and maintained using guidelines for skid trails and forest roads. Refer also to appropriate guidelines in Chapter 13: Timber Harvesting and Chapter 12: Forest Road Construction and Maintenance.
- All sites need to be inspected periodically. Look at your recreation site from a critical perspective. It is easy to overlook conditions that you see every day, so ask an associate or even a customer for critical feedback on your maintenance program. This work will pay off in reduced risk and improved understanding of the way others see your facility. At minimum, you need to inspect for diseased and defective trees from the standpoint of creating a hazardous situation, surface irregularities, signage, and other safety related conditions in your recreation area. In areas that will receive a lot of traffic (pedestrian or vehicular), periodically inspect the facility to determine whether a cultural resource is being damaged by public use of the area. If so, special protective measures may be desirable.
- Monitor recreation areas for the introduction of non-native invasive species, and take action to control them as necessary.
- Consider developing a firewood management policy to minimize the risk of introducing invasive insects and diseases.
- If your facility is for-profit, you will want to consider marketing. There are a number of local, regional, state, and national associations and agencies eager to assist with the promotion of recreation facilities. The easiest way to get started is to contact your local Chamber of Commerce or Visitor and Convention Bureau.



Figure 18-8: This camper is being inspected for gypsy moth. Inspecting vehicles and other recreational equipment before leaving a site will help slow the spread of invasive species.

RESOURCES FOR ADDITIONAL INFORMATION

These resources are specific to the information in this chapter only. Refer to the Resource Directory for additional resources related to this chapter.

COUNTY FORESTS AND COUNTY PARKS

County Forestry and Parks Departments also operate recreational sites, and are a great source if you need additional advice.

DEPARTMENT OF TOURISM

The Wisconsin Department of Tourism provides guidance and leadership to Wisconsin's tourism industry, and ensures that tourism is a top contributor to the state's economy and quality of life.

<http://industry.travelwisconsin.com/>

FEDERAL AGENCIES

The Forest Service and National Park Service provide publications to guide the development and maintenance of recreation sites.

www.fhwa.dot.gov/environment/rectrails/publications.htm

UNIVERSITY OF WISCONSIN EXTENSION

The "Wisconsin Idea" promotes connections between people and the university. Extension agents and staff are available to assist with business ventures and with planning.

WISCONSIN ASSOCIATION OF CAMPGROUND OWNERS (WACO)

WACO, a non-profit association, is a federation of private Wisconsin campgrounds dedicated to the promotion, usage, growth, and improvement of campgrounds in the State of Wisconsin.

www.wisconsincampgrounds.com/

WISCONSIN COUNCIL ON FORESTRY

The council directed the process to develop Best Management Practices for Invasive Species, including Best Management Practices for Preventing the Spread of Invasive Species by Outdoor Recreation Activities in Wisconsin. Other topics of invasive BMPs include: Forestry, Urban Forestry and Transportation and Utility Corridors.

<http://council.wisconsinforestry.org/invasives/recreation.php>

WISCONSIN DEPARTMENT OF HEALTH SERVICES (DHS)

Wisconsin Department of Health Services - The Division of Public Health regulates some of the activities normally associated with forest-based recreation. DHS Administrative Code 175 covers Recreation and Education Camps, Code 178 regulates campgrounds, and Code 195 regulates hotels, motels, and tourist rooming houses.

<http://dhs.wisconsin.gov/>
www.dhs.wisconsin.gov/fsrl/index.htm

WISCONSIN DEPARTMENT OF NATURAL RESOURCES (DNR)

Talk to local state forest or park staff, or with the Bureau of Parks and Recreation for practical advice on Americans with Disabilities Act of 1990 (ADA) design considerations and in recreational management. Specialists in drinking water, wastewater, water regulation and zoning, and other areas may also be valuable to you. The Wisconsin DNR also has a series of handbooks to guide in the operations of recreation facilities (e.g., *Wisconsin DNR Design Standards Handbook*, 8605.1, *Wisconsin DNR Trails Handbook*, 2540.5). These handbooks are designed for internal use, but may provide tips for your operation. The Bureau of Community Financial Assistance provides grants and loans to develop recreation sites.

<http://dnr.wi.gov/>

WISCONSIN PARK AND RECREATION ASSOCIATION

Founded in 1965, the Wisconsin Park and Recreation Association is a statewide, voluntary organization dedicated to enriching the professional and educational opportunities available to leisure service personnel in parks, recreation, therapeutic recreation, and related fields, so that they may better service the needs of their communities and or participants, and to advocate and promote the benefits of parks and leisure services to the general public.

www.wpraweb.org/